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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/588,464

08/04/2006

Yasuyuki Dewa

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EXAMINER

WOOD, ELLEN S

ART UNIT

PAPER NUMBER

1794

NOTIFICATION DATE

DELIVERY MODE

06/23/2008

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ADIPFDD@bipc.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/588,464	<b>Applicant(s)</b> DEWA ET AL.	
	<b>Examiner</b> ELLEN S. WOOD	<b>Art Unit</b> 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 10-24 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 10-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>03/14/2007; 08/04/2006</u> . | 6) <input type="checkbox"/> Other: ____.  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

3. In regards to claim 2, the applicant states ***"has a neutralization degree by potassium of 60% or more."*** The claim does not distinctly claim whether the percentage refers to weight percent or mol percent. Thus, the claim is indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-3 and 10-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakano et al. (US 2006/0189758, hereinafter "Nakano").

In regards to claim 1, Nakano discloses a thermoplastic resin composition comprising ionomer (A) of ethylene/acrylic acid copolymer, (B) ethylene or alpha-

olefin/glycidyl monomer copolymer and (C) propylene/alpha-olefin copolymer (abstract). The carboxyl group of the ethylene/acrylic acid copolymer is neutralized by a metal ion [0010]. The metal ion is an alkaline earth metal or alkali metal such as potassium [0013]. Copolymer (B) contains vinyl ester or unsaturated carboxylic acid ester [0015].

In regards to claim 2, Nakano discloses that the average acid content is in the range of 0 to 40%, preferably 0 to 30% [0011]. Preferably, 30 to 85 mol% of the carboxyl group of the ethylene/acrylic acid copolymer is neutralized by metal ion [0010].

In regards to claim 3, Nakano discloses that the thermoplastic resin (C) is a polyolefin type resin [0023].

In regards to claim 10, Nakano discloses that the average acid content is in the range of 0 to 40%, preferably 0 to 30% [0011]. Preferably, 30 to 85 mol% of the carboxyl group of the ethylene/acrylic acid copolymer is neutralized by metal ion [0010]. The thermoplastic resin (C) is a polyolefin type resin [0023].

In regards to claims 11-12, Nakano discloses that the resin composition can be molded into various articles [0030]. The articles may be mono-layer [0030].

In regards to claims 13 and 16, Nakano discloses a multilayer article with the resin composition [0037].

In regards to claims 14-15 and 17-18, Nakano discloses that the multilayer article may contain a layer comprising a thermoplastic resin (D) which is an olefin polymer [0036].

In regards to claims 19-24, Nakano discloses that the articles formed are shaped by various molding methods such as blow molding, such as films or sheets [0030].

Nakano is silent with the ranges of the varying components of the resin composition.

Nakano discloses that the resin composition has a blend ratio of 60 to 96.7 parts by weight of ionomer (A), 0.3 to 10 parts by weight of copolymer (B) and 3 to 30 parts by weight of (C). It would be obvious to one of ordinary skill in the art that the blend ratios could be determined by routine experimentation depending on the intended use of the resin composition. It would be advantageous to use a lower concentration of ionomer (A) and a higher concentration of (B) to maintain the thermoplastic properties that are essential during the blow molding process and still exhibit the abrasion resistance and scratch resistance once the article is formed.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ELLEN S. WOOD whose telephone number is (571)270-3450. The examiner can normally be reached on Monday-Friday 7-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carol Chaney can be reached on 571-272-1284. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1794

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Ellen S Wood  
Examiner  
Art Unit 1794

/Carol Chaney/  
Supervisory Patent Examiner, Art Unit 1794